

**REMARKS**

This Amendment is responsive to the Office Action dated April 6, 2006. Applicants have amended claims 1 and 4-7. Claims 1, 2, 4-33, 35-71 and 74-85 remain pending.

The cover page of the current Office Action indicates that the Office Action is non-final. However, it appears that the Examiner inadvertently indicated (at the end of the Office Action) that the Office Action was being made final. This appears to be a mistake, as the current Office Action should be non-final since it is the first Office Action following the recent RCE filing.

As a preliminary matter, Applicants would like to thank the Examiner for conducting the Examiner Interview on May 31, 2006. Applicants' representatives (Kelly Patrick Fitzgerald and Kent Sieffert) and Examiner Karen C. Tang were involved in the Examiner Interview, which was conducted over the telephone. During the Examiner Interview, claim 1 and the Wilford reference were discussed. Prior to the Examiner Interview, Applicants submitted a List of Issues to the Examiner via facsimile, a copy of which is attached to this response. During the interview, Applicants proposed some minor changes to claim 1 in order to address the Examiner's confusion and to overcome the rejections under 35 U.S.C. 112, second paragraph. Applicants also agreed to identify support in the specification for various features recited in claim 1, in order to overcome the rejections under 35 U.S.C. 112, first paragraph.

Finally, during the Examiner Interview Applicants pointed out that Wilford is fundamentally different than the features of claim 1 insofar as Wilford teaches a router architecture in which all the routing is performed by individual line cards. In contrast, the current pending claims require the routing functionality to be separate from the line cards (interface cards), such that a routing module performs routing of packets received by several different interface cards. Claim 1 also requires that the routing module include a packet forwarding engine and an interface card concentrator module that integrated into a single unit separate from the interface cards.

**Claim Rejections Under 35 U.S.C. § 112**

In the Office Action, the Examiner rejected claims 1, 2 and 4-15 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. In this response, Applicants have made

clarifying amendments to claim 1 in order to address the Examiner's concerns. In view of these changes, Applicants believe that the indefiniteness rejections have been overcome.

In the Office Action, the Examiner also rejected claims 1, 2 and 4-15 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement and the enablement requirement. Specifically, in the Office Action, the Examiner questioned whether Applicants' disclosure teaches "a routing module separate from the plurality of removable interface cards comprising a packet forwarding engine and an interface card concentrator module coupled between the packet forwarding engine and the plurality of interface cards." Based on discussions with the Examiner during the Examiner Interview, Applicants believe that the current amendments to claim 1 (with respect to clarity and purported indefiniteness) also address the Examiner's concerns with respect to enablement and written description. The phrase in question now reads "a router module separate from the plurality of removable interface cards, the router module comprising a packet forwarding engine and an interface card concentrator module, wherein the interface card concentrator couples the packet forwarding engine to the plurality of interface cards.

Claim 1, as amended, finds clear support in Applicants' disclosure sufficient to meet both the enablement and written description requirements. For example, FIG. 2 of the current application clearly shows multiple interface cards 206. As discussed on page 6, lines 7-17, with respect to FIG. 2:

An interface card concentrator manages the IFCs by performing packet processing on inbound and outbound data packets communicated via IFCs 206. The interface card concentrator may perform additional functions related to communicating data packets to and from IFCs 206, including, for example, storing the data packets in memory 212. In the embodiment shown in FIG. 2, the interface card concentrator includes two packet processing ASICs 210 that process data received through IFCs 206 and assemble outbound packets for sending through IFCs 206, as described more fully below. Each packet processing ASIC 210 can process inbound and outbound data for up to four IFCs 206. In connection with assembling outbound packets, each packet processing ASIC 210 reads data from memory 212. Memory 212 can be implemented using, for example, a conventional SDRAM device.

Furthermore, on page 6, line 23 to page 7, line 2, Applicants' disclosure provides that:

A route lookup ASIC 218 performs route lookup operations based on notifications received from memory management ASIC 216 when a packet is received through a network link 202. Upon receiving an inbound packet, route lookup ASIC 218 examines

information within the packet to identify the destination of the packet. Based on the destination, route lookup ASIC 218 selects an available route and forwards the packet to one of the IFCs 206 or to processor 220. Processor 220 forwards protocol packets to routing engine 224 via an Ethernet connection 226. Routing engine 224 then updates a routing table 222 and propagates any route changes to processor 220. Processor 220 then stores the selected routes in a forwarding table stored, for example, in a memory 228. Memory 228 may be implemented using a conventional SRAM device.

These passages clearly contemplate a router module separate from the plurality of removable interface cards, the router module comprising a packet forwarding engine (ASIC 218) and an interface card concentrator module (packet processing ASICs 210), wherein the interface card concentrator couples the packet forwarding engine to the plurality of interface cards.

For this reason, Applicants submit that claims, as amended, meet both the enablement and written description requirements of 35 U.S.C. 112, first paragraph. The disclosure clearly demonstrates that Applicants were in possession of the claimed invention at the time of filing, and also provide adequate detail to enable a person of ordinary skill in the art to make and use the claimed invention. Withdrawal of the rejections under 35 U.S.C. 112, first paragraph, is courteously requested.

In order to provide additional clarity with respect to the interface card concentrator, FIG. 2 and the paragraph on page 6, lines 7-17 have been changed merely to label this element. In particular, the paragraph on page 6, lines 7-17 has been amended to label the interface card concentrator as element 205. FIG. 2 has also been changed to show element 205 as including the two processing ASICs 210, which is discussed in the paragraph on page 6, lines 7-17. These changes are entirely consistent with the teaching of the paragraph on page 6, lines 7-17, and do not add any new matter.

### **Claim Rejection Under 35 U.S.C. § 103**

In the Office Action, the Examiner rejected claims 1, 2, 4-14, 16-30, 32, 33, 35-45, 47-61, 63-71, 74-79, and 81-83 under 35 U.S.C. 103(a) as being unpatentable over Wilford (USPN 6,687,247) in view of Merrel (USPN 6,553,408); and rejected claims 15, 31, 46, 62, 80, 84 and 85 under 35 U.S.C. 103(a) as being unpatentable over Wilford in view of Merrel and Zadikian et al. (USPN 6,724,757). Applicants respectfully traverse the rejections to the extent such rejections may be considered applicable to the claims as amended. The applied references fail to disclose

or suggest the inventions defined by Applicants' claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention.

In the Office Action, the Examiner essentially relied upon Wilford for many of the same erroneous reasons advanced in previous Office Actions. The Examiner relied on the Merrel reference solely for a teaching of "removable" interface cards, and relied on the Zadikian reference solely for a teaching of redundant router configuration. However, all pending rejections remain improper insofar as the Examiner is still clearly misinterpreting Wilford with respect to Applicants' claim language.

For example, in the Office Action, the Examiner indicated that Wilford teaches a packet forwarding engine that performs route lookups for packets received from at least two different interface cards. However, this is clearly not the case. Accordingly, for at least this fundamental reason, all pending rejections are clearly based on a misinterpretation of Wilford and must be withdrawn.

As explained previously on the record, and as discussed in detail in the Examiner Interview, Wilford does not disclose or suggest packet forwarding engine that performs route lookups for packets received from at least two different interface cards. Quite the contrary, in Wilford each individual line card includes its own local routing lookup circuit, and that local routing circuit only provides routing functions for packets of that respective line card.

Thus, like Wilford, the current claims require a router to make use of interface cards. However, unlike Wilford, the current claims require a routing module to be separate from the interface cards. Thus, whereas Wilford incorporates a routing circuit into each respective line card, the current claims require Applicants' routing module to have a packet forwarding engine that performs route lookups for packets received from at least two different interface cards. Nothing in Wilford suggests any element that performs route lookups for packets received from at least two different interface cards. Moreover, none of the other references overcome this deficiency of Wilford with respect to Applicants' claims. Accordingly, for at least this reason, all pending claims should be allowed.

Claim 1 requires a router module separate from the plurality of removable interface cards, and the router module includes a packet forwarding engine and an interface card concentrator. Claim 1 also requires that the interface card concentrator module communicates packets from at

least two of the removable interface cards to the packet forwarding engine, and that that packet forwarding engine performs route lookups for the packets received from the two different interface cards by way of the interface card concentrator module, wherein the packet forwarding engine selects routes for the packets and forwards the packets back to the plurality of interface cards via the interface card concentrator module. Claim 1 further requires that the packet forwarding engine and the concentrator module are integrated into a single unit separate from the plurality of interface cards.

In contrast to the features of claim 1 and the Examiner's comments with respect to these features, the Wilford reference describes a distributed architecture in which routing functions are performed by each interface card (referred to by Wilford as "linecards"). In fact, Wilford specifically refers to its architecture of FIG. 1 as a "distributed routing scheme" in which "routing is performed immediately on packet receipt [from the network 1] in each linecard."<sup>1</sup>

Furthermore, Wilford states that the linecards consists of three main sections: the network physical interface, the layer 3 packet switching system, and the fabric interface.<sup>2</sup> According to the Wilford architecture, each linecard includes three components: (1) the physical medium providing connectivity to the network, (2) routing lookup circuitry, and (3) an interface to switching fabric interconnecting the linecards.

Thus, Wilford describes each interface card as including includes its own, local route lookup circuit that is applied to packets as the packets are received from the network by that linecard. In other words, Wilford describes a routing architecture in which each interface card makes localized routing decisions only for packets received from a network by that same linecard. In this sense, Wilford describes the antithesis of a routing module that performs centralized routing functions for packets received from a network by two or more different removable interface cards, as required by Applicants' claims. The distributed routing architecture of Wilford is probably best illustrated in FIG. 1, reproduced below.

---

<sup>1</sup> Wilford at col. 2, ll. 29-31.

<sup>2</sup> Wilford at col. 4, ll. 49-50.

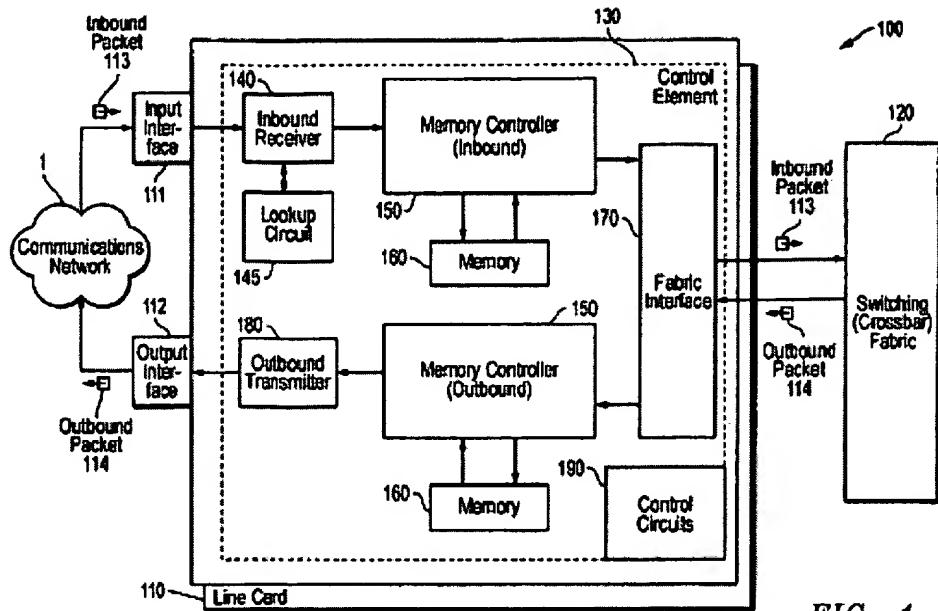


FIG. 1

As shown in FIG. 1 of Wilford, the Wilford router includes a plurality of linecards 110 (which is an interface card in the sense that it provides the physical medium for connecting the network as explained by Wilford). In Wilford, each linecard 110 specifically includes its own corresponding lookup circuit 145 that performs route lookup for packets 113 received from network 1 by that particular linecard. Each linecard 110 provides a physical interface 111, which is described as part of the linecard that provides physical connection to network 1.<sup>3</sup> Each linecard 110 further includes an inbound receiver 140 thereon for receiving the packets directly from communication network 1. Lookup circuit 145 is only coupled to the inbound receiver 140, and the lookup circuit for each linecard performs route lookups only for the inbound packets received from the network 1. In other words, lookup circuit 145 does not perform route lookups for any packets received from any other linecard. As evidence of this point, Wilford states:

In a manner well-known in the art, packets are received from the physical medium of the network at input interface 111. The inbound packet receiver 140 operates in conjunction with lookup circuit 145 to determine routing treatments for inbound packets 113.<sup>4</sup>

Similarly, with respect to the embodiment of FIG. 2, Wilford makes clear that inbound receiver 220 directs only a portion of inbound packets 113 to lookup circuit 225 for route lookup.<sup>5</sup>

<sup>3</sup> Wilford at col. 4, ll. 53-55.

<sup>4</sup> Wiford at col. 1, ll. 58-67.

<sup>5</sup> Colford at col. 5, ll. 13-15.

After performing the route lookup, the lookup circuit of Wilford forwards the inbound packets to switch fabric interface 170 for outputting to the communication network 1 by any of the other linecards, without performing any further route lookups outside of the linecard. As illustrated by FIG. 1 and FIG. 2 of Wilford, and as made clear by the corresponding description in Wilford, route lookups are only applied to an inbound packets by the linecard 110 that received the packet from the network. No lookup circuit 145 performs route lookups for packets received by any other linecard 110.

Thus, contrary to the Examiner's comments in the Office Action, Wilford fails to teach or suggest a router module separate from the plurality of removable interface cards, which performs routing with respect to packet received from two or more of the interface cards. In contrast, Wilford makes abundantly clear that route lookup circuits 145 and 225 are distributed to each linecard 110, and that in the "distributed routing scheme" of Wilford routing is performed "immediately on packet receipt [from the network] in each linecard."<sup>6</sup> There simply is no router module in the Wilford architecture that is separate from a removable interface card.

In addition, Wilford also fails to suggest a router module having an interface card concentrator module that communicates packets from at least two different removable interface cards to the packet forwarding engine, and that the packet forwarding engine performs route lookups for the packets received from the at least two different ones of the plurality of interface cards by way of the interface card concentrator module to select routes for the packets and forwards the packets back to the plurality of interface cards via the interface card concentrator module.

Indeed, insofar as Wilford teaches a distributed in which routing functions are performed by each interface card, the notion of an interface card concentrator is completely at odds with Wilford. On this point, the Examiner argues that switch fabric 120 is a concentrator module and refers to FIG. 1. However, switch fabric 120 does not communicate packets from at least two different removable interface cards to a packet forwarding engine. Again, the packet forwarding functionality of Wilford is incorporated in line card 110, and therefore when a packet is sent to switch fabric 120 it already has its route destination. Consequently, switch fabric 120 is clearly

---

<sup>6</sup> Wilford at col. 2, ll. 29-31.

not an interface card concentrator that communicates packets from at least two different removable interface cards to a packet forwarding engine.

Furthermore, Wilford fails to disclose or suggest a routing module in which a packet forwarding engine and a concentrator module are integrated into a single unit separate from the plurality of interface cards. On this point, the Examiner simply cites FIG. 1 of Wilford. However, as previously explained, Wilford describes a lookup circuit 145 that is in the line card and separate from switch fabric 120 (which the Examiner argues is an interface card concentrator). Thus, even if switch fabric 120 could be construed as an interface card concentrator (which Applicants dispute) this element is clearly not integrated into a single unit with lookup circuit 145. Thus, for this additional reason, the Examiner's interpretation of Wilford is flawed.

With respect to dependent claim 2, Wilford does not describe a routing device in which a midplane is coupled between a plurality of interface cards and the router module and separates the plurality of removable interface cards from the router module. In rejecting claim 2, the Examiner refers to the fabric interface 170 of FIG. 1 as a midplane. However, the switch fabric interface 170 is provided on the linecards 110, along with lookup circuit 145. Thus, switch fabric 170 is not coupled between linecards 110 and route lookup circuit 145 at all. For this same reason, switch fabric 170 does not separate the plurality of removable linecards 110 from the lookup circuit 145 as both of these elements are actually on the linecards.

With regard to dependent claim 11, Wilford fails to teach or suggest a packet forwarding module that selects routes lookups for the packets received from the at least two different ones of the plurality of interface cards by referencing a forwarding table, wherein the forwarding table stores route information for forwarding data packets received from any of the plurality of interface modules. As described above, FIG. 1 of Wilford makes clear that the lookup circuit 145 is only coupled to inbound receiver 140. Thus, the lookup circuit 145 performs routing functions only for packets received from the network by input interface 111 of that particular linecard. In other words, in Wilford, lookup circuit 145 does not process packets received from other linecards. Accordingly, no route lookup is performed at all for packets received from other linecards. Consequently, Wilford does not teach or suggest a packet forwarding engine that selects routes to forward packets using a forwarding table that stores route information for

forwarding data packets received from any of the different interface modules, as required by claim 11.

All of the other independent claims should be allowed for at least the reasons advanced above with respect to independent claim 1. Each of the other independent claims are addressed briefly below.

Independent claim 16 requires a router module comprising a packet processing circuit, a memory management circuit, and a route lookup circuit integrated into a single module separate from a plurality of interface cards. Claim 16 specifically requires that the route lookup circuit be separate from a plurality of interface cards. Thus, claim 16 clearly distinguishes Wilford and the other applied references for essentially the same reasons advanced above with respect to claim 1.

Again, Wilford fails to teach or suggest a route lookup circuit integrated into a single module separate from a plurality of interface cards, as required by claim 16. Directly to the contrary, in Wilford, lookup circuits 145 and 225 are provided on a single card 110 along with interfaces 111 and 112.

Moreover, Wilford fails to teach or suggest a routing device in which the midplane communicates to the router module packets received from the network by at least two different ones of the interface cards, and wherein the central router module performs route lookups for the packets received from the at least two different ones of the interface cards to select routes for the packets and forward the packets back to the interface cards in accordance with route information associated with the network. As discussed in detail above, Wilford makes it very clear that route lookup circuit 145 only performs route lookups for inbound packets 113 received from the network 1 and not for any packets received from any other linecards 110.

With regard to dependent claim 24, Wilford fails to teach or suggest a packet forwarding module that selects routes for the packets received from the at least two different ones of the interface cards by referencing a forwarding table, wherein the forwarding table stores route information for forwarding data packets received from any of the plurality of interface cards. As described above, FIG. 1 of Wilford makes clear that the lookup circuit 145 is only coupled to inbound receiver 140 and only performs routing functions for packets received from the network by that particular linecard. Therefore, lookup circuit 145 does not perform route lookup for packets received from other linecards. For this reason, Wilford clearly does not teach or suggest

a packet forwarding engine that selects routes to forward packets using a forwarding table that stores route information for forwarding data packets received from any of the different interface cards, as required by claim 24.

Independent claim 32 recites routing arrangement comprising a crossbar arrangement, and a plurality of routing devices coupled to the crossbar arrangement. At least one of the routing devices comprises a plurality of removable interface cards to communicate data packets using a network, and a router module separate from the plurality of interface cards. The router module performs route lookups for a first set of the data packets received from the network by a first one of the interface cards and for a second set of the data packets received from the network by a second one of the interface cards to select routes for the data packets and to forward the data packets between the interface cards, and the router module comprises a system control module that performs the route lookups and at least one concentrator module that receives the data packets from at least the first one and the second one of the removable interface cards. The system control module and the concentrator module are integrated into a single unit.

Independent claim 32 should also be allow for at least the reasons advance above with respect to claim 1. In particular, none of the applied prior art suggests a router module that performs route lookups for a first set of the data packets received from a network by a first interface card and for a second set of the data packets received from the network by a second interface card. Instead, Wilford describes line cards that each include there own lookup circuit. Furthermore, none of the applied prior art suggests a concentrator module, much less a concentrator module integrated with a system control module into a single unit.

Independent claim 47 recites a routing arrangement comprising a crossbar arrangement; and a plurality of routing devices coupled to the crossbar arrangement. At least one of the routing devices comprises a plurality of removable interface cards to communicate data packets using a network, a router module comprising a packet processing circuit, a memory management circuit, and a route lookup circuit integrated into a single module separate from the plurality of interface cards, and a midplane coupled to the router module and to the plurality of interface cards. The midplane communicates to the router module a first set of packets received from the network by a first one of the interface cards and a second set of packets received from the network by a different one of the interface cards, and the router module performs route lookups

for the first set of packets and the second set of packets in accordance with route information associated with the network.

Claim 47 should also be allowed for at least those reasons advanced above, insofar as this claim recites a router module performs route lookups for the first set of packets and the second set of packets in accordance with route information associated with the network. Claim 47 also recites the midplane, which is addressed above with respect to claim 16, and is also lacking from the teaching of Wilford, contrary to the Examiner's analysis.

Independent claim 63 recites a router comprising one hardware board integrally housing an interface concentrator that provides electrical interfaces to receive incoming packets from a plurality of interface cards, a packet processing circuit, a memory management circuit, and a route lookup circuit separate from the interface cards to perform route lookups to select routes for a first packet and a second of the incoming packets received from a network by different ones of the plurality of interface cards. Like the other claims, this claim requires a route lookup circuit separate from the interface cards to perform route lookups for two or more interface cards, and should be allowed for at least this reason.

Independent claim 71 recites a method of manufacturing a routing device, the method comprising providing a plurality of interface modules to communicate data packets using a network, coupling a midplane to the plurality of interface modules, and coupling a single router module to the midplane. Like many of the other claims, claim 71 also requires the router module to be configured to perform route lookups for data packets received from different ones of the interface modules via the midplane to select routes for the packets in accordance with route information associated with the network and forward the packets back to the interface modules by way of the midplane. In addition, claim 71 requires the router module to comprise a system control module and at least one concentrator module integrated into a single unit separate from the interface modules. For at least these reasons advanced above, claim 71 should also be allowed.

Claim 81 also recites a method of manufacturing a routing device. The method of claim 81 requires providing a plurality of interface cards to communicate data packets using a network, providing a routing module separate from the plurality of interface cards, and coupling the router module comprising a packet processing circuit, a memory management circuit, and a route

lookup circuit integrated into a single module to the plurality of interface cards via a midplane. Claim 81 also requires the router module to be configured to perform route lookups for the data packets received from different ones of the plurality of interface cards to select routes for the packets in accordance with route information associated with the network and forward the packets back to the interface modules by way of the midplane. For reasons advanced above, this claim should also be allowed.

Claim 82 recites a method of manufacturing a routing arrangement. The method of claim 82 requires providing a crossbar arrangement, and coupling a plurality of routing devices to the crossbar arrangement. According to claim 81 at least one routing device comprises a plurality of interface cards to communicate data packets using a network, and a router module separate from the plurality of interface cards to process the data packets and to forward the data packets between the interface cards. Like many other claims, the router module recite in claim 82 is configured to perform route lookups for the data packets received from different ones of the interface cards to select routes for the packets in accordance with route information associated with the network. Accordingly, this claim should also be allowed at this time.

Claim 83 also recites a method of manufacturing a routing arrangement. The method of claim 83 comprises providing a crossbar arrangement, and coupling a plurality of routing devices to the crossbar arrangement. According to claim 83, at least one routing device comprises a plurality of interface cards to communicate data packets using a network, a midplane coupled to the plurality of interface cards, a router module coupled to the midplane to receive the data packets from the midplane prior to route selection. The router module comprises a packet processing circuit, a memory management circuit, and a route lookup circuit integrated into a single module separate from the plurality of interface cards. Like many other claims, claim 83 requires the router module to be configured to perform route lookups for the data packets received from different ones of the interface cards to select routes for the packets in accordance with route information associated with the network and forward the packets back to the interface cards by way of the midplane.

Claim 84 recites a routing arrangement comprising a plurality of routing devices coupled in a crossbar arrangement. According to claim 84, at least one routing device comprises a plurality of interface modules to communicate data packets using a network, and a router module

to receive the data packets from at least two different ones of the interface modules. Like many other claims, the router module of claim 84 is configured to perform route lookups for the data packets received from the at least two interface modules to select routes for the packets in accordance with route information associated with the network. The routing arrangement recited in claim 84 also requires a switch arrangement coupled to the plurality of routing devices and configured to switch control from a first routing device to a second routing device.

Claim 85 recites a routing arrangement comprising a plurality of routing devices coupled in a crossbar arrangement. According to claim 85, at least one routing device comprises a plurality of interface cards to communicate data packets using a network, a router module comprising a packet processing circuit, a memory management circuit, and a route lookup circuit integrated into a single module separate from the plurality of interface cards and a routing engine, and a midplane coupled to the router module and to the plurality of interface cards to provide data packets from the interface cards to the router module. The router module is configured to perform route lookups for the data packets received from any of the interface cards to select routes for the packets in accordance with route information associated with the network and forward the packets back to the interface cards by way of the midplane. The routing arrangement recited in claim 85 also requires a switch arrangement coupled to the plurality of routing devices and configured to switch control from a first routing device to a second routing device.

Many of the distinctions outlined above also apply with respect to claims 84 and 85. Accordingly, these claims should also be allowed insofar as Wilford and the other applied reference fail to disclose or suggest a router module configured to perform route lookups for data packets received from a plurality of interface cards, or a packet processing circuit, a memory management circuit, and a route lookup circuit integrated into a single module separate from the interface cards.

## CONCLUSION

In conclusion, all claims in this application are in condition for allowance insofar as the Examiner has clearly misinterpreted Wilford in a number of respects. Wilford describes a distributed router arrangement in which individual line cards each include their own routing lookup circuit. In contrast, all of the pending claims require a routing module (or packet forwarding engine) that performs route lookups for packets received from different interface cards. In addition, many claims require an interface card concentrator that forward such packets from different interface cards to the routing module that performs the route lookups for packets received by the different, interface cards which is inapposite the Wilford arrangement. Furthermore, many claims require the interface card concentrator to be integrated into a common unit with the packet forwarding engine. Finally, many claims recite a midplane, which is also lacking from Wilford.

The foregoing comments primarily address the Wilford reference, and the Examiner's flawed interpretations of this reference. However, none of the secondary references provide any teaching that would overcome the deficiencies of Wilford discussed above. The Examiner relied on the Merrel reference solely for a teaching of "removable" interface cards, and relied on the Zadikian reference solely for a teaching of redundant router configuration. Applicants reserve further comment on these references at this time.

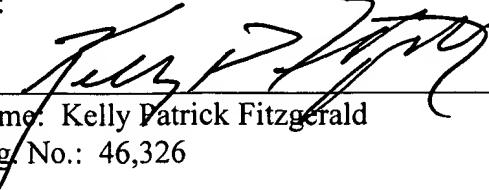
The various dependent claims should be allowable for at least the reasons advanced above with respect to the independent claims. Moreover, other reasons may also exist. Applicants do not acquiesce to any of the Examiner's rejections or characterizations of the prior art, and reserves the right to present additional arguments with respect to the independent or dependent claims.

Applicants respectfully request reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date:

June 5, 2006  
SHUMAKER & SIEFFERT, P.A.  
8425 Seasons Parkway, Suite 105  
St. Paul, Minnesota 55125  
Telephone: 651.735.1100  
Facsimile: 651.735.1102

By:

  
Name: Kelly Patrick Fitzgerald  
Reg. No.: 46,326